



City of Seattle

Gregory J. Nickels, Mayor

Seattle Public Utilities

Chuck Clarke, Director



Public Health

Seattle & King County

HEALTHY PEOPLE. HEALTHY COMMUNITIES.

Alonzo L. Plough, Ph.D., MPH, Director

Date: January 5, 2005

BACKFLOW PREVENTION REQUIREMENTS

PROJECT DESCRIPTION:

NEW RESTAURANT BUILDING

MUP #: 2404452

ADDRESS: 3100 AIRPORT WY SO.
SEATTLE, WA

BLDG TYPE: RESTAURANT

CONTACT: ED LINARDIC

(206) 283-4764

REQUIREMENTS:

- Install proper backflow prevention (AVB, PVBA, DCVA, or RPBA) on irrigation systems. (SPU Administrative Authority)
- Install DCVA on domestic services 3 stories or 30 feet in height above the meter. (SPU Administrative Authority)
- Install DCVA on fire line services 3 stories or 30 feet in height above meter containing materials not approved for domestic water piping. RPBA required on any fire system with chemical addition, connected to auxiliary water supply, or constructed with non-potable plumbing material. (SPU Administrative Authority)
- Provide RPBA on water supplies to heating systems boilers, heat pumps, cooling towers, HVAC systems, chillers, carbonators, etc. (KCHD Administrative Authority)
- Other equipment connected to the domestic water supply may require backflow protection. (KCHD Administrative Authority)

RPBA - Reduced Pressure BackFlow Assembly, DCVA - Double Check Valve Assembly,
PVBA - Pressure Vacuum Breaker Assembly, AVB - Atmospheric Vacuum Breaker.

All backflow assemblies used must be on the most current WSDOH approved list. Proper installation procedures and clearances required are available through the appropriate administrative authority. SPU will inspect premises isolation assemblies to ensure the assembly is installed properly and is the correct assembly for degree of hazard. KCHD will inspect in-premises isolation assemblies to ensure the assembly is installed properly and is the correct assembly for degree of hazard. To schedule an inspection of your system after assemblies have been installed and tested, or if you have questions concerning backflow prevention, please call the appropriate administrative authority: for SPU please call (206) 684-3536 and for KCHD, please call (206) 233-5135.

Reviewed by: M. Fan

Date: 1-6-05



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Cross Connection Control for Boilers

Seattle Public Utilities (SPU) and King County Health Department (KCHD) are the administrative authorities engaged in a joint program identifying actual and potential cross-connections between the public water supply and possible sources of contamination. The control of cross-connections is accomplished in two basic methods. (1) **Premises isolation:** SPU is responsible for protection of the public water system. This is done by requiring backflow protection at the service connection when required. (2) **In-Premises:** KCHD is responsible for all backflow protection requirements within the premises.

The Rules and Regulations of the Washington State Department of Health (WSDOH) require that certain premises install backflow prevention assemblies at the water supply connection as a condition of water service (WAC 246-290-490, Table 9). Backflow prevention assemblies shall be installed within any premises where in the judgement of SPU and/or KCHD the nature of the activities on the premises or the materials stored on the premises present a hazard should a backflow incident occur.

Water uses that may require installation of WSDOH approved backflow prevention assemblies are:

HAZARD/USE:

Boiler's with chemical addition,
make-up water, supplying heating
systems, supplying non-potable systems,
not dual-walled leak protected.

TYPE OF PROTECTION:

Reduced Pressure Backflow Assembly (RPBA) or Air Gap

All backflow assemblies used must be on the most current WSDOH approved list. Proper installation procedures and clearances required are available through the appropriate administrative authority. SPU will inspect premises isolation assemblies to ensure the assembly is installed properly and is the correct assembly for degree of hazard. KCHD will inspect in-premises isolation assemblies to ensure the assembly is installed properly and is the correct assembly for degree of hazard. To schedule an inspection of your system after assemblies have been installed and tested, or if you have questions concerning backflow prevention, please call the appropriate administrative authority: for SPU please call (206) 684-3536 and for KCHD, please call (206) 233-5135.

NOTE: All backflow assemblies are required to be tested annually.



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Cross Connection Control for Fire Sprinkler Systems

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The Rules and Regulations of the Washington State Department of Health (WSDOH) require that certain premises install backflow prevention assemblies at the water supply connection as a condition of water service (WAC 246-290-490, Table 9). Backflow prevention assemblies shall be installed within any premises where in the judgement of SPU and/or KCHD the nature of the activities on the premises or the materials stored on the premises present a hazard should a backflow incident occur.

Water uses that may require installation of WSDOH approved backflow prevention assemblies are:

HAZARD/USE:

- Systems which contain chemicals, systems with auxiliary supply or storage tank.
- Systems where pipe materials are not approved for potable water usage, systems which exceed 3 stories or 30 feet above meter grade, systems that includes a booster pump.

TYPE OF PROTECTION:

Reduced Pressure Backflow Assembly (RPBA) or Air Gap

Double Check Valve Assembly (DCVA)

All piping material prior to the RPBA or DCVA must be approved for potable water usage.

All backflow assemblies used must be on the most current WSDOH approved list. Proper installation procedures and clearances required are available through the appropriate administrative authority. SPU will inspect premises isolation assemblies to ensure the assembly is installed properly and is the correct assembly for degree of hazard. KCHD will inspect in-premises isolation assemblies to ensure the assembly is installed properly and is the correct assembly for degree of hazard. To schedule an inspection of your system after assemblies have been installed and tested, or if you have questions concerning backflow prevention, please call the appropriate administrative authority: for SPU please call (206) 684-3536 and for KCHD, please call (206) 233-5135.

NOTE: All backflow assemblies are required to be tested annually.



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Cross Connection Control for Food Service & Processing Equipment

Seattle Public Utilities (SPU) and King County Health Department (KCHD) are the administrative authorities engaged in a joint program identifying actual and potential cross-connections between the public water supply and possible sources of contamination. The control of cross-connections is accomplished in two basic methods. (1) **Premises isolation:** SPU is responsible for protection of the public water system. This is done by requiring backflow protection at the service connection when required. (2) **In-Premises:** KCHD is responsible for all backflow protection requirements within the premises.

The Rules and Regulations of the Washington State Department of Health (WSDOH) require that certain premises install backflow prevention assemblies at the water supply connection as a condition of water service (WAC 246-290-490, Table 9). Backflow prevention assemblies shall be installed within any premises where in the judgement of SPU and/or KCHD the nature of the activities on the premises or the materials stored on the premises present a hazard should a backflow incident occur.

Water uses that may require installation of WSDOH approved backflow prevention assemblies are:

HAZARD/USE:

- Dishwasher, ice maker with reservoir or float system, drain line to waste.
- Ice maker with water-cooled condenser, chemical addition system, carbonated beverage dispenser, fume hood, refrigeration unit, steam connected facility (autoclaves, retorts, etc). Any equipment used for storing, washing, cleaning or transmission of food. Boiler, heat pump, and cooling tower make up water, water cooled equipment, auxiliary water supply.
- Steamer

TYPE OF PROTECTION:

- Air Gap
- Reduced Pressure Backflow Assembly (RPBA) or Air Gap
- Double Check Valve Assembly (DCVA)

All backflow assemblies used must be on the most current WSDOH approved list. Proper installation procedures and clearances required are available through the appropriate administrative authority. SPU will inspect premises isolation assemblies to ensure the assembly is installed properly and is the correct assembly for degree of hazard. KCHD will inspect in-premises isolation assemblies to ensure the assembly is installed properly and is the correct assembly for degree of hazard. To schedule an inspection of your system after assemblies have been installed and tested, or if you have questions concerning backflow prevention, please call the appropriate administrative authority: for SPU please call (206) 684-3536 and for KCHD, please call (206) 233-5135.

NOTE: All backflow assemblies are required to be tested annually.



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Cross Connection Control for Irrigation Systems

Seattle Public Utilities (SPU) and King County Health Department (KCHD) are the administrative authorities engaged in a joint program identifying actual and potential cross-connections between the public water supply and possible sources of contamination. The control of cross-connections is accomplished in two basic methods. (1)

Premises isolation: SPU is responsible for protection of the public water system. This is done by requiring backflow protection at the service connection when required. (2) **In-Premises:** KCHD is responsible for all backflow protection requirements within the premises.

The Rules and Regulations of the Washington State Department of Health (WSDOH) require that certain premises install backflow prevention assemblies at the water supply connection as a condition of water service (WAC 246-290-490, Table 9). Backflow prevention assemblies shall be installed within any premises where in the judgement of SPU and/or KCHD the nature of the activities on the premises or the materials stored on the premises present a hazard should a backflow incident occur.

Water uses that may require installation of WSDOH approved backflow prevention assemblies are:

- **Atmospheric Vacuum Breaker (AVB)** may be used on a single zone irrigation system, must be installed 6 inches above highest fixture, no shutoff valves allowed downstream, must run less than 12 hours in a 24 hour period.
- **Pressure Vacuum Breaker Assembly (PVBA)** may be used on a multi zone irrigation system, must be installed 12 inches above highest fixture, shutoff valves are allowed downstream.
- **Double Check Valve Assembly (DCVA)** may be used on multi zone irrigation system; it protects against backpressure and backsiphonage, required on all pumped or elevated piping systems, which may cause backpressure. May be installed in irrigation box.
- **Reduced Pressure Backflow Assembly (RPBA)** required on all systems when fertilizers, herbicides, or other materials are injected into the irrigation system. Assembly must be installed a minimum of 12 inches above ground.

All backflow assemblies used must be on the most current WSDOH approved list. Proper installation procedures and clearances required are available through the appropriate administrative authority. SPU will inspect premises isolation assemblies to ensure the assembly is installed properly and is the correct assembly for degree of hazard. KCHD will inspect in-premises isolation assemblies to ensure the assembly is installed properly and is the correct assembly for degree of hazard. To schedule an inspection of your system after assemblies have been installed and tested, or if you have questions concerning backflow prevention, please call the appropriate administrative authority: for SPU please call (206) 684-3536 and for KCHD, please call (206) 233-5135.

NOTE: All backflow assemblies are required to be tested annually.